9

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,582	10/02/2003	Thomas Powers	91943.000249	8194

54600 7590 11/20/2007
MTI - INTELLECTUAL PROPERTY
HARTER, SECREST & EMERY, LLP
1600 BAUSCH & LOMB PLACE
ROCHESTER, NY 14604

EXAMINER	
ANTHONY, JOSEPH DAVID	
ART UNIT	**PAPER NUMBER**
1796	
MAIL DATE	**DELIVERY MODE**
11/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED
NOV 16 2007
GROUP 1700

Application Number: 10/677,582
Filing Date: October 02, 2003
Appellant(s): POWERS, THOMAS

Paul A. Leipold
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/09/2007 appealing from the Office action mailed 10/19/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,921,026	SAARI ET AL.	7-2005
5,262,375	MCKEDY	11-1993

6,248,690	MCKEDY	6-2001
US2003/0042166A1	WATERMAN	3-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

EXAMINER NOTE: The examiner want to point out two facts regarding the scope of applicant's claimed invention prior to setting forth the actually prior-art rejections. 1) Applicant's claimed oxygen absorbing compositions are in no case to be viewed as being limited to liquid compositions. In fact, the oxygen absorbing compositions taught in applicant's examples 1-4 (which are all the examples in the specification) are in solid form primarily due to applicant's required water binding carrier component which is also a required component in applicant's independent claim 1. 2) The term "water activity below 0.6;" as set forth in independent claim 1, means equilibrium relative humidity levels below 60%. This factually interpretation comes directly from applicant's owns specification on page 6, lines 8-13 wherein **% equilibrium relative humidity (ERA) = water activity (A_w) x 100**.

Claims 1-8 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Saari et al. U.S. Patent Number 6,921,026.

Saari et al teach a humidity control device for use in maintaining a desired humidity, said device including a water vapor permeable pouch and a thickened saturated salt solution, said pouch being formed of a thin wall polymer film through which water vapor may pass, said thickened saturated salt solution comprising water, salt, and a thickening agent, said salt being preferably present in an amount of between 20 and 75 percent by weight based on the weight of the combination of water and salt, but 5% to 90% by weight is the broad range for said salt (see column 8, lines 4-8). **Note: when said salt is used in an amount of 80 to 90% by weight, applicant's claimed water concentration limitation of 10-20 wt% is met.** Said thickening agent is present in amount sufficient to thicken the salt solution, said salt solution being contained within the polymeric pouch and sealed from escape from the pouch, said pouch containing the thickened salt solution being contained within a protective case to protect the pouch from rupture, and the pouch containing 0.25 to 75% oxygen scavenger (reads on applicant's oxygen reducing agent) and a mold inhibitor, see abstract, column 3, line 26 to column 4, line 31 and claims 24, and 37-38. The oxygen scavenger is preferably reduced iron with particle size between 100 and 325 mesh, see examples and claims 37-41. Applicant's claims are deemed to be anticipated in light of Saari et al direct disclosure to employing different solutes (e.g. salts or mixtures of salts) at different concentration amounts that will result in thickened salt solutions that have various relative humidity levels (i.e. water activity) from 97% to 6%, see column 4, line 46 to column 5, line 13. **Especially note, that Saari et al directly teaches that *calcium chloride* (reads on both applicant's claimed humectant salt and electrolyte salt) at an equilibrium relative humidity level at 29% (i.e. water activity of 0.29) can produce/maintain humidity levels in between 20% and 29%, see column 4, lines 66-67.**

In the alternative, it seems that none of Saari et al's examples actually have an equilibrium relative humidity (i.e. water activity) level that is within applicant's claimed range of below 0.6 (i.e. below 60%). It would have been obvious to one having ordinary skill in the art to use the direct disclosure of Saari et al as strong motivation to actually make thickened humidity/oxygen absorbing compositions that have an equilibrium relative humidity (i.e. water activity) level that is within applicant's claimed range of below 0.6 (i.e. below 60%) since such is directly suggested by the reference in column 4, line 61 to column 5, line 4.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McKedy U.S. Patent Number 5,262,375 or McKedy U.S. Patent Number 6,248,690.

McKedy '375 teaches an oxygen-absorbing composition containing particulate annealed electrolytically reduced iron of between about 100 mesh and 325 mesh in an amount of about up to 99.6% by weight, a salt such as sodium chloride **(reads on applicant's electrolyte salt or humectant salt)** in an amount by weight of about up to 3.5%, and optionally a water-attracting and supplying component such as silica gel **(reads on applicant's claimed carrier component and applicant's claimed humectant salt solution)** of a mesh size of between about 30 mesh and 325 mesh in an amount by weight of up to about 80%. A packet for absorbing oxygen including a stain and grease resistant envelope containing the oxygen-absorbing composition. A grease and stain resistant laminate consisting of plies of various plastics and grease and stain resisting paper, see abstract, column 3, lines 5-62 and claims. The disclosed oxygen absorbers are thus very useful in absorbing oxygen from a dry environment. Applicant's claims are deemed to be anticipated over Example 3, that sets forth 3 different formulations that are deemed to have a water activity (i.e. equilibrium relative humidity (ERH)) that are inherently no higher than applicant's claimed maximum amount even though the patent does not expressively state what the water activity is for the taught oxygen absorbing compositions. The Examiner calculated water content of formulations 2 and 3, of Example 3, are clearly within applicant claimed range of 10-20 water weight percent. Referring to formulation 3, see column 6, lines 42-46, a composition was made that contains 0.85 grams of mesh annealed electrolytic reduced iron and 1.36 grams of silica gel containing 26% water and 1.5% sodium chloride. The total weight of the composition is thus 0.85 grams + 1.36 grams + 1.5% sodium chloride which is a little over 2.21 grams (i.e. 0.85 + 1.36). The calculated grams of water contained in the silica gel is (1.36 x .26 = 0.35 grams water). The weight percentage of water in the composition as a whole is thus approximately (0.35 / 2.21) x 100 = 15.8 weight %. If the same calculation was done for formulation 2, see column 6, lines 12-16, the calculated water content of the composition would be about 14.0 weight percent. As such, both formulations 2-3 of Examples 3 clearly fall within applicant's claimed water concentration ranges of 10-20 weight percent. It should be noted that the courts have constantly held that a newly discovered property does not impart patentability to an otherwise old composition, see In re Spada, 15 USPQ 2d 1655 (CAFC 1990).

McKedy '690 teaches an oxygen-absorbing composition containing particulate annealed electrolytically reduced iron of between about 100 mesh and 325 mesh in an amount of about up to 63% by weight, a salt such as sodium chloride **(reads on applicant's electrolyte salt or humectant salt)** in an amount by weight of about up to 3.5%, and a water-supplying component such as silica gel **(reads on applicant's claimed carrier component and applicant's claimed humectant salt solution)** or activated carbon with liquid water therein of a mesh size of between about 20 mesh and 50 mesh in an amount by weight of up to about 85% in an envelope which will resist the passage of liquid water out of the envelope but will permit flow of oxygen into the envelope at a satisfactory rate. The disclosed oxygen absorbers are thus very useful in absorbing oxygen from a dry environment, see abstract, column 1, lines 50-67, and column 3, line 40 to column 4, lines 67. Applicant's claims are deemed to be anticipated over Examples 3-15 that are deemed to have a water activity (i.e. equilibrium relative humidity (ERH)) that are no higher than applicant's claimed maximum amount even though the patent does not expressively state what the water activity is for the taught oxygen absorbing compositions. Note McKedy '690 Example 3 uses silica gel as the water attracting and supplying component (reads on applicant's carrier component), whereas Examples such as 5, 10, 12 and 14 use hydrated activated carbon as the water attracting and supplying component.

In the alternative, the McKedy patents only directly teach (i.e. by way of an example) a three-component composition wherein silica gel is one of the components. It would have been obvious to use another water-attracting and water supplying component other than silica gel such as a zeolite, molecular sieve and salts, see column 3, lines 51-62 of '375. Furthermore, applicant's claims read on both a three component composition (wherein the carrier component also functions as an electrolyte salt component or a humectant salt component) and on a four component composition (wherein the carrier component, electrolyte salt component and humectant salt solution component are all different. It would have been obvious to one having ordinary skill in the art to use the disclosure of either McKedy patent as motivation to use admixtures of one or more of the water-attracting and water supplying component, or electrolyte salt component, see column 3, lines 26-35 of '375, since the courts have constantly declared that to use two or more components together for the same purpose that they are taught to be individually useful is not patentable because they are expected to complement each other, In re Kerhoven, 205 USPQ 1069 (CCPA 1980).

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waterman PUB. NO. US 2003/0042166 A1.

Waterman discloses pharmaceutical kits that reduce or prevent oxidative degradation of oxygen-sensitive pharmaceutically active ingredients in solid unit dosage forms that are supplied in oxygen permeable containers. Stabilization of the active ingredient which is in a low-humidity environment in is accomplished by incorporating an oxygen absorber into a sealed oxygen permeable container, see abstract. The disclosed oxygen-absorbing composition for a low-humidity environment includes a reduced metal (e.g. electrolytic iron) and an accelerator having at least one of iodide and bromide. The accelerator may have at least one of a metallic iodide salt and a metallic bromide salt. The reduced metal and the accelerator may be included in a dry state and the oxygen-absorbing composition may take the form of particles, see document sections [0019], [0020] and [0021]. Optionally adjuvants may be incorporated into the oxygen absorbing compositions such as *moisture-holding materials* such as activated carbon, silicas, zeolites, molecular sieves, hydrogels, and diatomaceous earth (these components read on applicant's carrier component), see section [0021. Also note that the disclosure of Hatakeyama et al. U.S. Patent Number 6,133,361 is incorporated by reference, see section [0021]. Furthermore, applicant's attention is drawn to sections [0019] through [0020] of the reference. Also note that U.S. Patent Number 6,133,361 was incorporated by reference which directly discloses additives such as bromide salts, see column 6, lines 18-30 of said patent.

Waterman have been described above and differs from applicant's claimed invention in that there is no direct teaching (i.e. by way of an example) to an oxygen absorbing composition that actually comprises a carrier material such as a water-absorbing/releasing material. It would have been obvious to one having ordinary skill in the art to use the disclosure of Waterman as strong motivation to actually incorporate a water absorbing/releasing carrier material into the oxygen absorbing compositions taught by each patent since such an addition is strongly suggested by the disclosure of each reference. Furthermore, applicant's claimed water activity (i.e. equilibrium relative humidity (ERH)) limitation for the oxygen absorbing compositions of claims 1-8 are deemed to be inherently met by the oxygen absorbing compositions disclosed by

Waterman even though it does not expressively state what the water activity is for their taught oxygen absorbing compositions.

(10) Response to Argument

One of applicant's main arguments for patentability over the applied prior-art references is applicant's assertion that the applied prior-art references do not expressively disclose that their compositional components have the same intended use as applicant intends for his compositional components. This argument of applicant is no only misleading it is deemed to be moot even if it were totally true. Applicant is reminded that the claims being examined are compositional claims that must absorb oxygen when used. All of the applied prior-art compositions clearly perform this function of oxygen absorbing. Not only that, the prior-art compositions contain all of applicant's required components and meet applicant's claimed water percent concentration range and water activity limit of below 0.6. The fact that the prior-art may not call there salt components by applicant's name of electrolyte salt or humectant salt is totally irrelevant since they all use salts that read on applicant's claimed and disclosed salts and the compositions containing the salts meet all of applicant's claim limitations/parameters. Applicant also argues that the applied prior-art references have "different" intended uses for their oxygen absorbing compositions than does applicant have for his oxygen absorbing compositions (e.g. absorbing oxygen at low relative humidity levels). Such an argument is on its face is moot since the claims being examined are composition claims not method of use claims. In any case, all the above applied prior-art references are deemed to teach/suggest oxygen absorbing compositions that will absorb oxygen under low relative humidity levels since they all contain all of applicant's claimed components and it is known that a composition and is properties are inseparable.

Applicant argues in the bridging paragraph on pages 4-5 of the Appeal Brief, that: " Saari does discuss thickening the salt solution with vegetable gum or other hydrocolloids but the Examiner has not argued and Saari provides no support for these thickeners having water binding characteristics as claimed by applicant.". In response to applicant's said assertion, the Examiner had no need to make such an argument nor did Saari et al need to say such, because Saari et al.'s vegetable gum or other hydrocolloids inherently function by binding water. Saari et al.'s specification and the Examiner's rejections were written for one having ordinary skill in the art, and one reading them is presumed to also have ordinary skill in the art. In determining the level of ordinary skill in the art, the court admonishes not to presume stupidity, In re Sovish, 226 USPQ 771 (CAFC 1985).

In regards to the applied McKedy Patents, applicant makes the following assertions: 1) "McKedy et al (690) also discloses particulate material whereas the instant claims require a solution comprising water, a humectant salt and an electrolyte salt.", see page 7, lines 7-9 of the Appeal Brief and 2) McKedy (375) "However, the materials in the examples would not meet other limitations claimed, in that McKedy materials are not disclosed as a solution comprising water, and water binding carrier, and humectant salt and electrolyte salt characterized by a water activity of below 0.6. It appears that these McKedy materials are particulate not a solution and do not contain an electrolyte salt.", see page 13, lines 24-28. The above two assertions by applicant are clearly in error and are also misleading. The body of the prior-art rejections made over McKedy 9375) and McKedy (690) clearly teach/suggest combining all of the components that make up applicant's claimed oxygen absorbing compositions. Furthermore, applicant's above arguments seem to imply that applicant's pending oxygen absorbing compositions are in the final form of a solution that does not read on the solid compositions taught by the McKedy patents. As the Examiner has pointed out above, applicant's claimed oxygen absorbing compositions are in no case to be viewed as being limited to liquid compositions. In fact, the oxygen absorbing compositions taught in applicant's examples 1-4 (which are all the examples in the specification) are in solid form primarily due to applicant's required water binding carrier component which is also a required component in applicant's independent claim 1. Furthermore, the way applicant's independent claim 1 is written, the required solution is only one component of the overall claimed oxygen absorbing composition. The overall claimed oxygen absorbing composition does not have to be in the final form of a solution.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Joseph D. Anthony

Joseph D. Anthony

Art Unit 1796

11/12/07

Conferees:

Harold Pyon (SPE Group Art Unit 1796)

Romulo Delmendo

Appeal Conferee